viated by a sufficient elevation of the compass as practised upon iron ships.

Mr. Gibbes remarked that the plant known to the settlers along the San Joaquin as the "Wild Artichoke," is Lycopus Europæus, commonly termed the Water Horehound. The resemblance of the thickened runners to the Jerusalem artichoke, suggested the name Wild Artichoke. The two plants are widely separated botanically—one belonging to the Labiatæ, or mint family; the other is the Helianthus tuberosus of the natural order Composite or Aster family. This last must not be confounded with a composite plant, the flowering heads of which are sold in our markets as artichokes.

Mr. Gibbes also referred to a species of Sagittaria, presented by him, which he collected on the tule lands bordering the San Joaquin River, as interesting, inasmuch as it enabled him to determine a plant, the tubers of which he had often seen in the Chinese markets, but never was able to get specimens of the growing plant. He supposed it to be an introduced vegetable from China; it is, however, a plant indigenous to California, and is also found in many parts of the United States. It is, probably, S. variabilis, which furnishes a half-dozen varieties. In referring to the literature of this plant, he found no author referring to the tuberous character of the roots, except in one of the reports of the Pacific Railroad surveying parties, where they are said to be eaten by the Indians, who term them "Wapatoo."

Prof. E. S. Carr read an abstract from an unpublished paper by John Muir, describing living glaciers, discovered by the latter gentleman in the canons of Tuolumne county.

Descriptions of Three New Species of Crustacea, Parasitic on the Cetacea of the N. W. Coast of America.*

BY W. H. DALL, U. S. COAST SURVEY.

Genus Cyamus, Lam.

Cyamus Lam. Syst. An. s. Vert. p. 166. Bate & Westwood, ii, p. 80. Larunda and Panope. Leach.

Cyamus Scammoni, n. sp. 5 Body moderately depressed, of an egg ovate form; segments slightly separated. Third and fourth segments furnished with a branchia at each side. This, near its base, divides into two cylindrical fila-

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ments spirally coiled from right to left. At the base of each branchia are two slender accessory filaments not coiled, quite short, and situated, one before, and the other behind, the base of the main branchia. Second pair of hands, kidney-shaped, with the carpal articulation half-way between the distal and proximal ends; and having two pointed tubercles on the inferior edge, before the carpal joint. Third and fourth segments somewhat punctate above, all the others smooth; the sixth and seventh, slightly serrate on the upper anterior edge, and without ventral spines. Color yellowish white. Lon. '70, lat. '39 in. of largest specimen.

♀ Similiar to the ♂ in all respects, excepting in being a little more slender, and in wanting the accessory appendages to the branchiæ; the ovigerous sacs are four in number, overlapping each other.

Habitat, on the California Gray Whale, Rhachianectes glaucus of Cope, on the coast of California; very numerous. This species is named in honor of Capt. C. M. Scammon, U. S. Rev. Marine, well known by his studies on the cetaceans. The specimens here described were collected and submitted by him for description, and will be figured in his forthcoming monograph of the West Coast whales. I may remark here that these species are all so distinct from those figured by Milne-Edwards, Gosse, Bate and Westwood, that a comparative description has seemed unnecessary; also, that the species obtained on different species of cetaceans have so far been found invariably distinct. The inference is, of course, that each cetacean has its peculiar parasites, a supposition which agrees with our knowledge of the facts in many groups of terrestial animals.

Cyamus suffusus, n. sp. Body flattened, clongate; segments subequal, outer edges widely separated. Branchiæ, single, cylindrical slender, with a very short papilliform appendage before and behind each branchia. Superior antennæ unusually long and stout. First pair of hands quadrant-shaped; second pair slightly punctate, arcuate, emarginate on the inferior edge, with a pointed tubercle on each side of the emargination. Third joint of the posterior legs keeled above, with a prong below. Pleon extremely minute. Segments all smooth. No ventral spines on the posterior segments. Color, yellowish white, suffused with rose-purple, strongest on the antennæ and branchiæ. Length, '41, breadth (of body) '25 in. All the specimens which have passed under my observation, some eight or ten in number, were males.

Habitat, on the "hump-back" whale, Megaptera versabilis, Cope, Monterey, California.

Cyamus mysticeti, n. sp. Body flattened, subovate, segments adjacent. Branchiæ single, short, stout, pedunculated, a single papilliform appendage behind each. Head short and wide. First pair of legs very small. Hands all simple and smooth, fingers greatly recurved. Carpal articulation in the second pair of hands, half way between the proximal and distal ends of the hand. Pleon very minute. Color dark brownish yellow. Length 33 in; breadth (of body) 16 in. Two female specimens.

Habitat, on the northern "bowhead" whale, probably Balæna mysticetus, Lin., near Bering Strait.

This is the most compact of the three species, as well as the smallest. I find in comparing large series of *C. Scammoul*, that a considerable variation in form obtains so far as regards comparative length and breadth, even in adult specimens, and these differences are greater than those observed, in the same characters, between the sexes.

Notes on Pre-Historic Remains in the Aleutian Islands.

BY W. H. DALL, U. S. COAST SURVEY.

Captain's Bay. Unalashka.—There are several village sites on this bay which, inhabited during the period subsequent to the Russian occupation of the territory, are now, and long have been deserted. The principal are the Pestriakoff, or Eider village, near Cape Cheerful; one on the south part of Amaknak Islandjust south of Expedition Island, on Iliuliuk Harber, and one in Nateckin Bay; beside the Kalekhta Bay village, more recently evacuated by its inhabitants. The only localities now inhabited are the village of Imagnee on Summer Bay, the village of Iliuliuk, and another of two or three houses, on Uknadok or Hog Island.

In executaing for the erection of a signal, at the northern end of Ulakhta Spit, Amaknak Island, the nature of the materials brought out showed that the locality had once been inhabited. Subsequent inquiries elicited the fact that the oldest inhabitants of Iliuliuk had never heard of any village being situated here, although villages which were deserted in the last century are well known by tradition to the Aleuts of the present day. Hence, it is a reasonable supposition that the village under consideration must at least have ante-dated the Russian invasion of 1760, and may have been older. Hence, the implements, etc., found in this deposit, are in all probability the same as those originally in use among the natives of this region before the introduction of manufactured articles of trade by civilized nations. On this account they are of singular interest. A careful examination of the locality afforded the following observations:

The Ulakhta Spit projects from Amaknak Island, trending nearly in a north and south direction. It is very narrow, being in some places only seven meters wide, and is composed entirely of shingle overlaid by a stratum of vegetable mould, which supports a luxuriant growth of the native grasses. Near the junction of the spit with the main island, it rises, and is continued in a series of low mounds for a quarter of a mile. Between these mounds and the mountainous portion of Amaknak Island, called Ulakhta Head, is a low and narrow strip of ground containing a small pond of brackish water. The highest of these mounds is quite near the north head of the spit, and it was here that my signal was located.

Upon this mound, about twenty feet above high water-mark, by careful scrutiny, I was able to detect at least three depressions of considerable size, which I judged to be the sites of houses of the ancient Aleutian fashion, that is to say, half underground, of sufficient size to accommodate a number of families, each

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